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John S Beulick
Armstrong Teasdale LLP
One Metropolitan Square
Suite2600
St Louis, MO 63102

EXAMINER	
CHANG, ERIC	

ART UNIT	PAPER NUMBER
2116	16

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/754,419	DAUM, WOLFGANG	
	Examiner	Art Unit	
	Eric Chang	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 May 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-22 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-8 and 10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,848,028 to Burklin.

5. As to claim 1, Burklin discloses a system for updating the time and date of all of the electronic devices within the system, the system comprising:

[a] a communications network being coupled to each of said electronic devices within said network [col. 1, lines 40-42]; and

[b] wherein each of at least two said electronic devices has a time and date set feature capable of being set by a user [col. 4, lines 10-13]; wherein any one of said at least two electronic devices is configured to communicate a time and date set function to any respective

electronic device after having received a set instruction until all devices within said communications network have been set [col. 1, lines 61-67, and col. 2, lines 1-4].

Burklin teaches that any one of the devices in the network is able to communicate a time and date function to all other devices in order to synchronize the clocks within the system [col. 4, lines 35-39]. Burklin further teaches that although the device with the highest precision clock is the one that generally initiates the synchronization, any one of the devices may have the highest precision clock [col. 4, lines 38-39]. In addition, Burklin teaches that the system may be updated following a user intervention to immediately synchronize [col. 1, lines 40-55], such as the use of a user-initiated set instruction, substantially as claimed.

Burklin teaches all of the limitations of the claim, but does not teach that the clocks in the other devices in the system are automatically set when a change in time occurs. However, Burklin teaches that devices in the network have clocks that may be set by a user [col. 4, lines 10-13]. Because a user changing the time in a clock comprises user intervention, it would further be obvious to one of ordinary skill in the art that such a change in time should automatically cause all the clocks in the devices on the network to update their respective times, substantially as claimed. One of ordinary skill in the art would have been motivated to do so that the user-set time would be used to synchronize the system after the time had been thusly set. Moreover, synchronizing the clocks in the network after a user means would improve the utility of Burklin because it allowed the user to enter a new time for all the network clocks, in addition to initiating an immediate synchronization.

6. As to claims 2-3, Burklin discloses the communications network comprises a communications module which utilized standard communications protocol to communicate time and date set data between said electronic devices within said communications network [col. 4, lines 13-15]. Burklin teaches a communications module, such as a bus interface unit, for coupling the device to a common network. It would have been well known to one of ordinary skill in the art that such a communications network may further comprises a Programmable Logic Controller, substantially as claimed.

7. As to claims 4-5, Burklin discloses the time and date set feature comprises a time code and a date code [col. 4, lines 5-9].

8. As to claim 6, Burklin discloses a process for updating the time code and date code of the devices within a communications network, wherein each device comprises a microprocessor, a communications module, memory, and a key pad, the process comprising the following steps:

[a] reading the time and date code from memory [col. 4, lines 5-9];

[b] sending the time and date code to the communications controller [col. 4, lines 15-16];

[c] the communications controller sending time and date information to all of the electronic devices within the network [col. 1, lines 61-67, and col. 2, lines 1-4, and col. 2, lines 24-25]; and

[d] notifying the communications module of at least one time and date code before said time and date code is transmitted to the communications module [col. 4, lines 13-21].

Burklin teaches sending the time and date code to other devices within the network via a communications controller such as a bus interface unit. Burklin also teaches that the device is able to read its own time and date information [col. 4, lines 13-15, and col. 4, lines 24-34]; it is well known in the art that implementations of digital clocks store such time and date information within a memory, substantially as claimed. Furthermore, Burklin teaches the bus interface unit is only allowed to receive the time and date code after the delaying block DBL notifies the bus interface switch that a time and date code is allowed to be transmitted to the communications module.

9. As to claims 7 and 9, Burklin discloses reading the time and date information from memory upon execution of a clock setting routine [col. 3, lines 62-67]. Burklin teaches that a device should update its clock only if the time received by the clock-setting broadcast from another clock is repeatedly different from its own clock. Therefore, Burklin teaches that the device is able to read its own time and date information following a clock reset routine, in order to determine if such a difference exists. Burklin also teaches that the clock-setting broadcast is an interrupt received from the communications module [col. 4, lines 13-15, and col. 4, lines 24-34].

10. As to claims 10-11, Burklin discloses the time and date set feature comprises a time code and a date code [col. 4, lines 5-9].

11. As to claim 12, Burklin discloses a process for updating the time code of all the appliances within a communications network, including reading the time variable and sending the time and date code to other devices in the network via a communications module after being notified of said time and date code. Because Burklin teaches the process, Burklin teaches the apparatus implementing said process, substantially as claimed.

12. As to claim 13, Burklin discloses a process for updating the time code of all the appliances within a communications network, including communicating a time and date set function to other devices in the network when a change in the time occurs. Because Burklin teaches the process, Burklin teaches the system implementing said process, substantially as claimed.

13. As to claims 14-15, Burklin discloses the communications network comprises a communications module which utilized standard communications protocol to communicate time and date set data between said electronic devices within said communications network [col. 4, lines 13-15]. Burklin teaches a communications module, such as a bus interface unit, for coupling the device to a common network. It would have been well known to one of ordinary skill in the art that such a communications network may further comprises a Programmable Logic Controller, substantially as claimed.

14. As to claims 16-17, Burklin discloses the time and date set feature comprises a time code and a date code [col. 4, lines 5-9].

15. As to claim 18, Burklin discloses a process for updating the time code and date code of the devices within a communications network, wherein each device comprises a microprocessor, a communications module, memory, and a key pad, the process comprising the following steps:

[a] reading the time and date code from memory [col. 4, lines 5-9];

[b] sending the time and date code to the communications controller [col. 4, lines 15-16];

[c] the communications controller sending time and date information to all of the electronic devices within the network [col. 1, lines 61-67, and col. 2, lines 1-4, and col. 2, lines 24-25]; and

[d] notifying the communications module of at least one time and date code before said time and date code is transmitted to the communications module [col. 4, lines 13-21].

Burklin teaches sending the time and date code to other devices within the network via a communications controller such as a bus interface unit. Burklin also teaches that the device is able to read its own time and date information [col. 4, lines 13-15, and col. 4, lines 24-34]; it is well known in the art that implementations of digital clocks store such time and date information within a memory, substantially as claimed. Furthermore, Burklin teaches the bus interface unit is only allowed to receive the time and date code after the delaying block DBL notifies the bus interface switch that a time and date code is allowed to be transmitted to the communications module.

16. As to claim 19, Burklin discloses reading the time and date information from memory upon execution of a clock setting routine [col. 3, lines 62-67]. Burklin teaches that a device

should update its clock only if the time received by the clock-setting broadcast from another clock is repeatedly different from its own clock. Therefore, Burklin teaches that the device is able to read its own time and date information following a clock reset routine, in order to determine if such a difference exists. Burklin also teaches that the clock-setting broadcast is an interrupt received from the communications module [col. 4, lines 13-15, and col. 4, lines 24-34].

17. As to claim 21, Burklin discloses that a change in the official time distributed via radio causes the setting of clocks in the network [col. 1, lines 51]. Because the official time reflects a change from a standard to a daylight savings time, such a change would cause the setting of clocks in the network, substantially as claimed.

18. Claims 8, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,848,028 to Burklin, in view of U.S. Patent 6,363,256 to Muller et al.

19. As to claims 8 and 20, Burklin teaches all of the limitations of the claim, including having a device read and send time and date information to other devices on a network, but does not teach reading time and date information from memory after a clock set keypad entry function has been initiated. Burklin teaches that the user can initiate a system synchronization event [col. 1, lines 61-67, and col. 2, lines 1-4], but does not specifically teach that the synchronization should also occur after the clock of a device has been manually set.

Muller teaches reading time and date information from memory after a clock set keypad entry function has been initiated [col. 3, lines 51-54, and col. 4, lines 55-58]. Thus, Muller

teaches a clock setting means for a device on a network, similar to that of Burklin. Muller further teaches that the time and date information stores the time and date information to a memory after the user enters the new clock settings for the device, and that the device uses said information to synchronize other devices in the communications network.

At the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the user-initiated time entry as taught by Muller. One of ordinary skill in the art would have been motivated to do so that the user could reset the clocks within a network by manual entry of the new clock settings.

It would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references because they are both directed to the problem of synchronizing clocks within a system. Moreover, the user-initiated time entry means taught by Muller would improve the flexibility of Burklin because it allowed the updating to not only be occur after the user issues a synchronization instruction, but also after the user resets the clock with what is presumably a more accurate time than otherwise currently available to the devices on the network.

20. As to claim 22, Burklin teaches all of the limitations of the claim, including having a device read and send time and date information to other devices on a network, but does not teach the clock is automatically set when a brown-out condition occurs.

Muller teaches that clocks within a cordless telephone network may be resynchronized after a power loss event, such as a brown-out condition, occurs [col. 1, lines 44-50]. Thus, Muller teaches a clock synchronization method for a network of devices similar to that of Burklin.

At the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the power loss recovery resynchronization as taught by Muller. One of ordinary skill in the art would have been motivated to do so that the time from a clock in a device in the network may be used to set the clocks in other devices in the network.

It would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references because they are both directed to the problem of synchronizing clocks in a network. Moreover, the power loss recovery resynchronization means taught by Muller would improve the robustness of Burklin because it allowed the networked clocks to resynchronize even if the time in some of the devices is lost due to a power loss [col. 1, lines 44-46].

Conclusion

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Chang whose telephone number is (703) 305-4612. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on (703) 305-9717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 20, 2004
ec

REHANA PERVEEN
PRIMARY EXAMINER